

# TARSAL COALITION (PERONEAL SPASTIC FLATFOOT)

#### DESCRIPTION

A developmental problem where there is incomplete separation of bones in the hindfoot (tarsal bones). This may be asymptomatic but usually symptoms become apparent in the early teens or as a young adult as recurrent ankle sprains, and much of the hindfoot moves as a block, and cannot dissipate the forces through multiple joints.

## FREQUENT SIGNS AND SYMPTOMS

- Recurrent ankle sprains
- Rigid, flat foot (or feet)
- Foot fatigue
- Pain in the hindfoot that worsens with activity

### CAUSES

This is due to a problem of development while a fetus (before birth) where not all of the bones of the hindfoot separate completely from each other.

#### **RISK INCREASES WITH**

• Family history of tarsal coalition

### **EXPECTED OUTCOME**

Untreated, older adults get arthritis of the joints in the foot. When treated before the development of arthritis, return to full activity with some residual stiffness in the foot.

### POSSIBLE COMPLICATIONS

- Arthritis of the foot and ankle due to increased stress to other joints from the lack of motion at the joint where the coalition exists.
- Persistent and recurrent foot and ankle pain
- Recurrent ankle sprains

### GENERAL TREATMENT CONSIDERATIONS

Initial treatment consists of rest from the offending activity and medications and ice to help reduce inflammation and pain. Occasionally, a trial of casting or bracing the foot and ankle may be attempted to reduce inflammation and pain. Arch supports (orthotic) may help reduce pressure on the other joints of the hindfoot. Occasionally, a cortisone injection into the hindfoot may provide temporary relief. If the above treatment is not successful, surgery may be necessary. Surgical options include removing the bony bridge (coalition) or fusing the hindfoot (totally eliminating all motion in one or more joints of the hindfoot).



# MEDICATION

- Non-steroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take if surgery planned in 7 days or less), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact him/her immediately if any bleeding, stomach upset or an allergic reaction occurs.
- Pain relievers may be prescribed as necessary by your physician. Use only as directed and only as much as you need. These are usually only prescribed for post-surgical pain.
- Injections of corticosteroids may be given to reduce inflammation. There is a limit to the number of cortisone injections you may receive. Repeated injections may accelerate deterioration of the cartilage and joints of the foot, resulting in arthritis.

### HEAT AND COLD:

- Cold is used to relieve pain and reduce inflammation. Cold should be applied for 10 15 minutes every 2-3 hours for inflammation and pain, and immediately after any activity which aggravates your symptoms. Use ice packs or an ice massage.
- Heat may be used prior to performing stretching and strengthening activities prescribed by your physician, physical therapist or athletic trainer. Use heat pack or a warm soak.

### **NOTIFY OUR OFFICE IF**

- Pain, tenderness or swelling worsens despite treatment
- You experience pain, numbness, or coldness in the foot.
- Blue, gray or dusky color appears in the toenails
- Any of the following occur after surgery:
  - Fever, increased pain, swelling, redness, drainage or bleeding in the surgical area.

New, unexplained symptoms develop. Drugs used in treatment may produce side effects